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Operation Dominic  
Roger A. Meade

A very tall (6'5") Austin McGuire endured duty aboard the cramped confines of a submarine during World War II. After receiving a doctorate in physics from the University of Rochester, he came to Los Alamos in 1954, later participating in the Koa shot of Operation Hardtack I. In 1962, he was appointed Deputy Commander of the Los Alamos task unit of Joint Task Force 8 (8.1.1) and sent to Christmas Island for Operation Dominic.<sup>1</sup>

“When my travel orders for Christmas Island arrived, I boarded a C-118 transport with the rank of a General Officer. The flight [from Hawaii] to Christmas took four hours. When we landed, the pilot instructed us to remain in our seats. Very shortly thereafter, a very determined British Sergeant-Major marched aboard and strode to the front of the aircraft. He turned and addressed us in a Cockney accent saying, “Welcome to Christmas Island – not a very pleasant place you will find.” He then began a long and dreary recitation of safety hazards including sunburn, coral poisoning, traffic accidents and the manta rays in the ocean. “They are (the rays)”, he said, “huge beasts that come up out of the water flapping their wings.” All of us on the plane were amused and not the least bit intimidated, particularly the ridiculous part about the mantas.”<sup>2</sup>

Such was McGuire’s introduction to the British protectorate now known as Kiritimati. Because the United States had effectively abandoned the Pacific Proving Ground (Eniwetok and Bikini) at the onset of the test moratorium, another test site in the Pacific was needed for Dominic. In exchange for access to the Nevada Test Site, Great Britain approved United States use of Christmas Island.

On April 25, 1962, Lee Aamodt, McGuire’s boss, gave the go order for the first Los Alamos test, Adobe. Like all devices detonated at Christmas, Adobe had been assembled at Barbers Point, Hawaii, and flown to the drop area by a B-52 strategic bomber. Although a rainstorm prevented the task unit from photographing the fireball, Aamodt authorized the drop rather than sending the fully armed device back to Hawaii. Despite the lack of photography, other instrumentation, particularly from the B-57 sampler aircraft, proved Adobe was successful.<sup>3</sup>

Immediately after Adobe, McGuire assumed command of the task unit and gave the go order for the second Los Alamos test, Aztec, whose 410 kiloton yield produced “a brilliant light in the southwestern sky” and a shock wave that nearly destroyed his command post.<sup>4</sup> Following Aztec,

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<sup>1</sup> McGuire, Austin and Roger A. Meade, The Last Big Bang, LA-UR-16-26996. The Los Alamos Task Unit was initially commanded by Lee Aamodt. Although civilians, both McGuire and Aamodt were given military titles. TU 8.1.2 was the JTF designation for UCRL activities and personnel.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid. Barges equipped with lights, radio beacons, and radar reflectors served as targets.

<sup>4</sup> Ibid. Prior to the blast, the CP was abandoned, and personnel took shelter to avoid flying debris.

Los Alamos and Livermore conducted twenty more tests at Christmas, all weapons-related, that is “to gather data on nuclear devices.”<sup>5</sup> The Christmas Island portion of Dominic concluded with Sunset (LASL) on July 10<sup>th</sup> and Pamlico (UCRL) on July 11<sup>th</sup>. With that, both the Los Alamos and UCRL task forces left Christmas Island.

In addition to the Christmas Island tests, the Department Defense conducted two full system tests, Frigate Bird and Swordfish as part of Dominic. Frigate Bird, the successful launch of a Polaris missile with a UCRL warhead, detonated 11,000 feet above sea level. Swordfish was an antisubmarine rocket with a Los Alamos warhead.<sup>6</sup>

Although Dominic was scheduled to end after Pamlico, the operation was extended, ostensibly because the Soviet Union had not stopped atmospheric testing. Five additional tests, all airdrops, were authorized and carried out. Rather than returning to Christmas Island, all operations were staged out of Hawaii and executed at Johnston Island. Los Alamos conducted one of these tests, Chama, on October 18<sup>th</sup>. The UCRL carried out the other four, concluding with the 8.3 megaton Housatonic test of October 30<sup>th</sup>.

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<sup>5</sup> DOE/NV—209-Rev 16, September 2015.

<sup>6</sup> Ibid. The DOD also carried out an additional five tests, Operation Fishbowl, at Johnston Island.

Operation Dominic <sup>7</sup>						
Event	Laboratory	Date	Location	Type	Purpose	Yield
Adobe	LASL	04/25/1962	Christmas Island	Airdrop	Weapons Related	190 kt
Aztec	LASL	04/27/1962	Christmas Island	Airdrop	Weapons Related	410 kt
Arkansas	UCRL	05/02/1962	Christmas Island	Airdrop	Weapons Related	1.09 MT
Questa	LASL	05/04/1962	Christmas Island	Airdrop	Weapons Related	670 kt
Frigate Bird	UCRL	05/06/1962	Pacific	Rocket	Weapons Related	200-1000 kt
Yukon	UCRL	05/08/1962	Christmas Island	Airdrop	Weapons Related	100 kt
Mesilla	LASL	05/09/1962	Christmas Island	Airdrop	Weapons Related	100 kt
Muskegon	UCRL	05/11/1962	Christmas Island	Airdrop	Weapons Related	50 kt
Swordfish	LASL	05/11/1962	Pacific	Underwater	Weapons Effects	Low
Encino	LASL	05/12/1962	Christmas Island	Airdrop	Weapons Related	500 kt
Swanee	UCRL	05/14/1962	Christmas Island	Airdrop	Weapons Related	97 kt
Chetco	UCRL	05/19/1962	Christmas Island	Airdrop	Weapons Related	73 kt
Tanana	UCRL	05/25/1962	Christmas Island	Airdrop	Weapons Related	2.6 kt
Nambe	LASL	05/27/1962	Christmas Island	Airdrop	Weapons Related	43 kt
Alma	LASL	06/08/1962	Christmas Island	Airdrop	Weapons Related	782 kt
Truckee	UCRL	06/09/1962	Christmas Island	Airdrop	Weapons Related	210 kt
Yeso	LASL	06/10/1962	Christmas Island	Airdrop	Weapons Related	3 MT
Harlem	UCRL	06/12/1962	Christmas Island	Airdrop	Weapons Related	1.2 MT
Rinconada	LASL	06/15/1962	Christmas Island	Airdrop	Weapons Related	800 kt
Dulce	LASL	06/17/1962	Christmas Island	Airdrop	Weapons Related	52 kt
Petit	UCRL	06/19/1962	Christmas Island	Airdrop	Weapons Related	2.2 kt
Otowi	LASL	06/22/1962	Christmas Island	Airdrop	Weapons Related	81.5 kt
Bighorn	UCRL	06/27/1962	Christmas Island	Airdrop	Weapons Related	7.65 MT
Bluestone	UCRL	06/30/1962	Christmas Island	Airdrop	Weapons Related	1.27 MT
Starfish Prime Operation Fishbowl	LASL	07/09/1962	Johnston Island	Rocket	Weapons Effects	1.4 MT
Sunset	LASL	07/10/1962	Christmas Island	Airdrop	Weapons Related	1 MT
Pamlico	UCRL	07/11/1962	Christmas Island	Airdrop	Weapons Related	3.88 MT
Androscooggin	UCRL	10/02/1962	Johnston Island	Airdrop	Weapons Related	75 kt
Bumping	UCRL	10/06/1962	Johnston Island	Airdrop	Weapons Related	11.3 kt
Chama	LASL	10/18/1962	Johnston Island	Airdrop	Weapons Related	1.59 MT
Checkmate Operation Fishbowl	LASL	10/20/1962	Johnston Island	Rocket	Weapons Effects	Low
Bluegill 3 Prime Operation Fishbowl	LASL	10/26/1962	Johnston Island	Rocket	Weapons Effects	Submegaton
Calamity	UCRL	10/27/1962	Johnston Island	Airdrop	Weapons Related	800 kt
Housatonic	UCRL	10/30/1962	Johnston Island	Airdrop	Weapons Related	8.3 MT
Kingfish Operation Fishbowl	LASL	11/01/1962	Johnston Island	Rocket	Weapons Effects	Submegaton
Tightrope Operation Fishbowl	LASL	11/04/1962	Johnston Island	Rocket	Weapons Effects	Low

<sup>7</sup> Derived from DOE/NV—209-Rev 16, September 2015.